

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

MAXELL HOLDINGS, LTD.,

*Plaintiff,*

v.

AMPEREX TECHNOLOGY LIMITED,

*Defendant.*

CIVIL ACTION NO. 6:21-cv-347

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Maxell Holdings, Ltd. (“Maxell” or “Plaintiff”) files this Complaint for patent infringement (“Complaint”) against defendant Amperex Technology Limited (“ATL” or “Defendant”) and alleges as follows:

1. Maxell brings this patent infringement action against ATL reluctantly, after having attempted in good faith over an extensive period of time to address ATL’s infringement of many of Maxell’s foundational lithium-ion battery (“LIB”) patents and to license those same patents to ATL. Despite Maxell’s best efforts, ATL refused to seriously engage in licensing discussions, leaving Maxell no choice but to proceed with this litigation.

**Maxell’s Long History of Innovation**

2. Founded in 1961 as Maxell Electric Industrial Co., Ltd., Maxell is a leading pioneer of various technologies and inventions, and a global manufacturer of products across multiple industries, including in energy storage and battery technologies. In fact, Maxell was named after its very first product, the “**Maximum Capacity Dry Cell**,” a high performance dry-cell battery. Since its founding and development of alkaline dry batteries, Maxell has been on

the forefront of every major battery development, and was an early leader in the commercialization and improvement of LIBs—the technology relevant in this litigation.

3. Maxell has been a trusted household name for decades. In the 1980s, Maxell became a pop culture icon due to its colloquially known “Blown Away Guy” advertisements for audio cassettes. Originally conceived by Art Director Lars Anderson for a two-page spread in Rolling Stone Magazine, “Blown Away Guy” ran in television spots throughout the 1980s and became a staple in the living rooms of millions of Americans.



Blown Away Guy (<https://en.wikipedia.org/w/index.php?curid=53173757>)

4. Maxell has built up an international reputation for excellence and reliability, and for pioneering and leading the lithium-ion battery industry. Ever since 1963, when Maxell produced the first alkaline dry battery in Japan, Maxell has continued to achieve technological breakthroughs to meet the increasingly diversified needs of its customers for batteries. Utilizing battery technologies and manufacturing processes developed over this long period, Maxell provides a wide range of unique technologies. Maxell’s pioneering innovations in LIB technology broadly impact commercially important aspects of such technology in applications,

including enhancements enabling smaller sizes and larger capacities—critical to the mobile phone, smartphone, and other mobile application markets.

5. Maxell achieves high performance for its LIBs through technological breakthrough and developments in the active materials forming the positive and negative electrodes. Other pioneering innovations include the heat-resistant separator, and dispersion, coating, winding, sealing, and miniaturization technologies, which innovations have resulted in increased heat resistance and safety, smoother flows of ions and electrons, enablement of high-density packing, increased capacity and reliability, and increased leakage resistance.

6. Maxell has developed a significant portfolio of patents, trade secrets, and other know-how directed to LIB technology. As a LIB developer and industry leader, and due to its historical and continuous investment in research and development, Maxell has developed a significant portfolio of patents, trade secrets, and other know-how related to such technologies and actively enforces its patents through licensing and/or litigation.

7. Beginning in or around July 2012, Maxell and ATL entered into a series of non-disclosure agreements and memoranda of understanding to explore a potential commercial collaboration under which Maxell would design, manufacture, and supply ATL with LIB electrodes (including development and improvement of the LIB electrolyte) and ATL would provide Maxell with pouch-type LIB design and manufacturing services. In 2013, after materials were exchanged and feasibility studies were conducted, the parties abandoned their efforts and did not enter into collaboration.

8. On March 27, 2020, Maxell sent ATL a letter describing its LIB patent portfolio, explaining the value of the patented technologies to ATL's current and future products, and offering to begin mutually beneficial licensing discussions.

9. Since that time, Maxell has diligently sought to engage in productive licensing negotiations with ATL, but to no avail. Consequently, on March 26, 2021, Maxell sent ATL another letter describing ATL's use of certain of Maxell's patents and stating Maxell's willingness to grant ATL a license.

10. ATL continues to refuse to engage in serious licensing negotiations. Maxell is thus forced to bring this action against ATL as a result of ATL's knowing and ongoing infringement of Maxell's patents as further described herein.

### **PARTIES**

11. Plaintiff Maxell Holdings, Ltd. is a Japanese corporation with a principle place of business at, 1 Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun, Kyoto, Japan.

12. Upon information and belief, Defendant ATL is a Chinese corporation with its principal place of business at 3503 Wharf Cable TV Tower, 9 Hoi Shing Road, Tsuen Wan, New Territories, Hong Kong, SAR China.

### **JURISDICTION AND VENUE**

13. This is an action for infringement arising under the patent laws of the United States, 35 U.S.C. § 271. Accordingly, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

14. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, ATL is not a resident in the United States, and thus may be sued in any judicial district, including this one, pursuant to 28 U.S.C. § 1391(c)(3).

15. Upon information and belief, ATL is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this State and judicial district, including: (A) at least part of its infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in

other persistent conduct, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to Texas residents vicariously through and/or in concert with its alter egos, intermediaries, agents, distributors, importers, customers, subsidiaries, and/or consumers. For example, ATL is “[w]orking closely with world-renowned branded smartphones, tablets and notebooks OEMs, drones, robots and power tools specialists, VR/AR vanguards and various wearable and smart home technology trailblazers, . . . helping the world connect better, last longer, live easier and fly higher.” *See* <https://www.atlbattery.com/en/about.html>.

16. ATL designs, manufactures, sells, and markets rechargeable LIB cells, packs, and systems for companies worldwide. Its LIB products are used in a variety of products such as laptop computers, smart phones, digital media players, digital cameras and camcorders, cordless tools, and various consumer electronics. On information and belief, ATL, either directly or through entities under its control or influence, manufactures, makes, uses, sells, offers for sale, and/or imports products that fall within the scope of one or more claims of the asserted patents directly in the United States, and cells made by ATL can be found in various products all throughout the United States.

17. ATL was founded in 1999 and is based in Hong Kong, SAR China. According to ATL, it is “the world’s leading producer and innovator of lithium-ion batteries. We are known worldwide for our high-tech, high-volume prowess in developing, producing and packaging high quality rechargeable lithium-ion battery cells and packs. Our service, know-how, production capacity and system integration capability is second to none.” *See About Us*, ATL, <https://www.atlbattery.com/en/about.html>. ATL operates as a conglomerate with its headquarters in Hong Kong, SAR China, and has manufacturing subsidiaries in Dongguan,

China, and Ningde, China. On June 1, 2005, ATL began operating as a wholly owned subsidiary of TDK Corporation (“TDK”). TDK is a Japanese multinational electronics company that manufactures electronic materials, electronic components, and recording and data-storage media. ATL manufactures infringing lithium-ion batteries in China and sells them worldwide, including in the United States. ATL makes, uses, sells, offers to sell within the United States or imports to the United States infringing lithium-ion batteries through making sales, marketing to, and providing engineering support to U.S. based customers.

18. Via alter egos, representatives, authorized distributors, agents, intermediaries, importers, customers, subsidiaries, and/or consumers maintaining a business presence, operating in, and/or residing in the U.S., ATL has widely distributed and sold in retail stores, both brick and mortar and online, its infringing lithium-ion batteries in Texas including within this judicial district.

19. Upon information and belief, ATL has placed and continues to place infringing lithium-ion batteries into the stream of commerce via established distribution channels with the knowledge and/or intent that those infringing lithium-ion batteries are imported, used, offered for sale, sold, and continue to be sold in the United States and Texas, including in this judicial district.

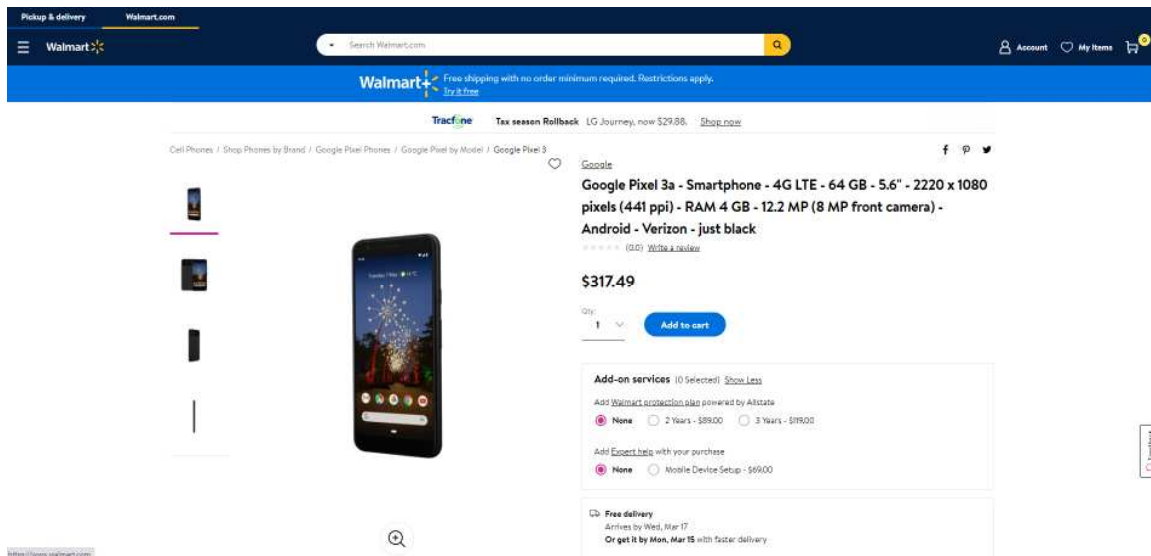
20. For example, ATL’s LIB products ATL Cell Nos. 465867, 575577N, 785075, 633360, and 2798B7 are utilized in at least the Google Pixel 3a, Dell d/b/a Alienware Type 44T2R notebook battery, DJI Mavic, DJI Spark, and Huawei MediaPad M5 Lite, respectively.

21. For example, the Google Pixel 3a smartphone utilizes an infringing LIB cell. Upon information and belief, ATL designed and manufactured a LIB cell with model number 465867 for use in the Google Pixel 3a smartphone.



ATL'S LIB Cell No. 465867 in Google Pixel 3a Smartphone

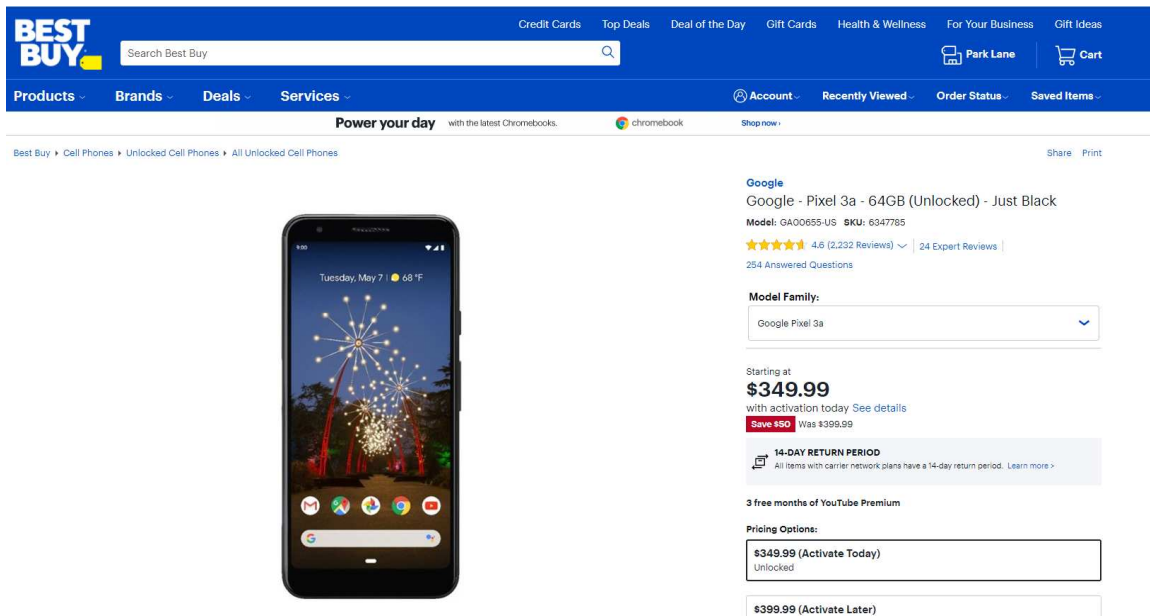
22. Upon information and belief, the Google Pixel 3a smartphone, designed and sold by Google LLC, is widely sold and distributed in Texas and in this District. Retailers such as Amazon.com, Best Buy, and Walmart have and continue to sell the Google Pixel 3a.



Walmart's Landing Page for a Google Pixel 3a Smartphone

23. The Google Pixel 3a smartphone can be purchased through Walmart's website.

See *Google Pixel 3a*, WALMART.COM, <https://www.walmart.com/ip/Google-Pixel-3a-Smartphone-4G-LTE-64-GB-5-6-2220-x-1080-pixels-441-ppi-RAM-4-12-2-MP-8-front-camera-Android-Verizon-just-black/869055523>.



#### Best Buy's Landing Page for a Google Pixel 3a Smartphone

24. The Google Pixel 3a smartphone can be purchased through Best Buy's website.

See *Google Pixel 3a*, BESTBUY.COM, <https://www.bestbuy.com/site/google-pixel-3a-64gb-unlocked-just-black/6347785.p?skuId=6347785>.

25. For example, the Dell d/b/a Alienware Type 44T2R notebook battery utilizes an infringing LIB cell. Upon information and belief, ATL designed and manufactured a LIB cell with model number 575577N for use in the Dell d/b/a Alienware Type 44T2R notebook battery.

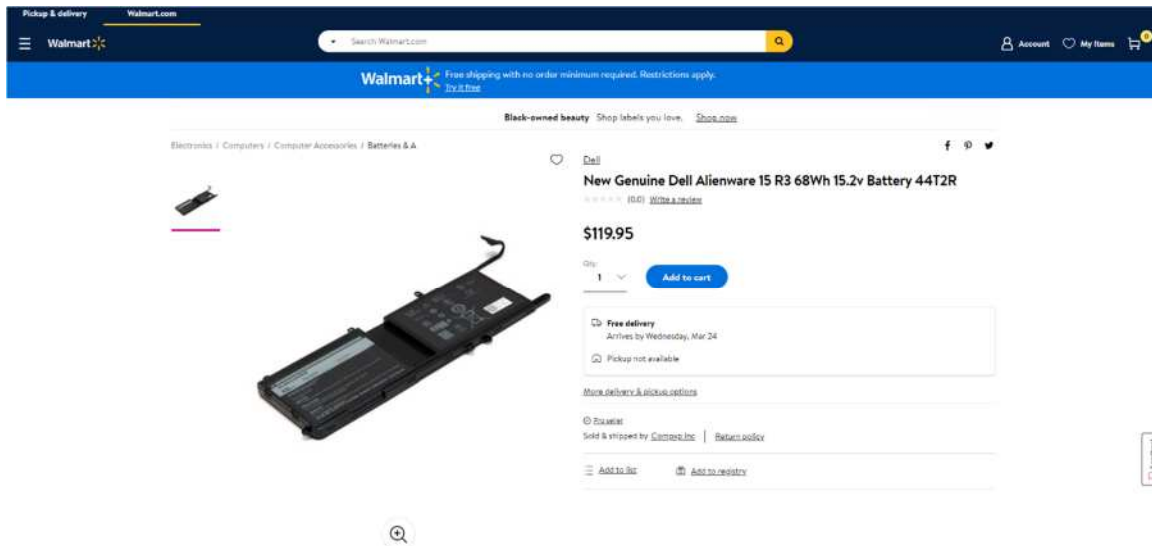




ATL'S LIB Cell No. 575577N in Dell d/b/a Alienware Type 44T2R Notebook Battery

26. Upon information and belief, the Dell d/b/a Alienware Type 44T2R notebook battery, designed and sold by Dell d/b/a Alienware, is widely sold and distributed in Texas and in this District. Dell and retailers such as Walmart have and continue to sell the Dell d/b/a Alienware Type 44T2R notebook battery.

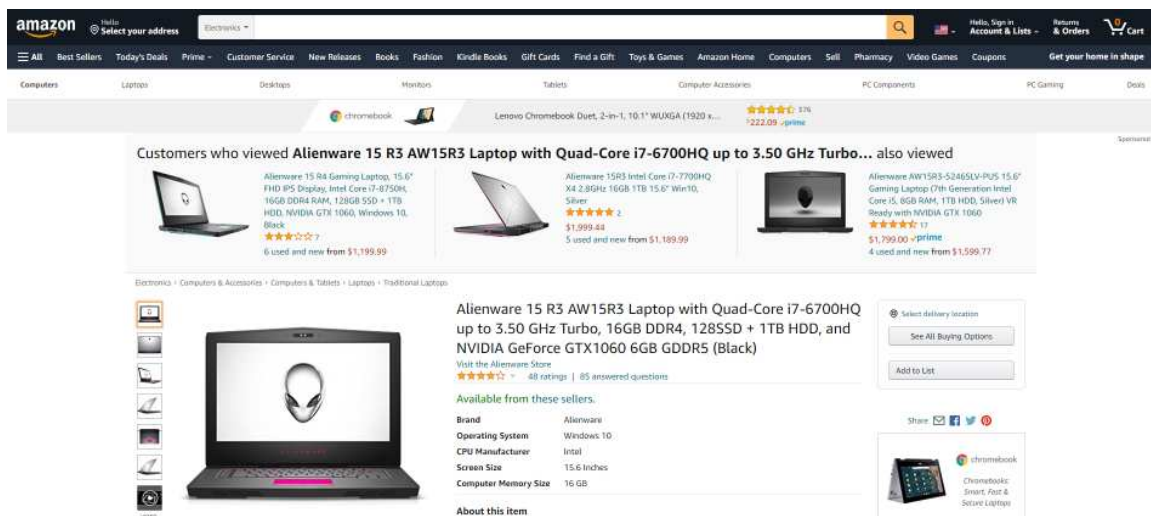
27. Upon information and belief, the Dell d/b/a Alienware Type 44T2R notebook battery has been and can be purchased directly from Dell's subsidiary, Dell Marketing L.P., located in Round Rock, TX, for delivery in Texas or nationwide.



Walmart's Landing Page for a Dell d/b/a Alienware Type 44T2R Notebook Battery

28. The Dell d/b/a Alienware Type 44T2R notebook battery can be purchased through Walmart's website. *See Dell Alienware Battery 44T2R*, WALMART.COM, <https://www.walmart.com/ip/New-Genuine-Dell-Alienware-15-R3-68Wh-15-2v-Battery-44T2R/946300933>.

29. Upon information and belief, the Type 44T2R notebook battery was incorporated into certain models of Dell d/b/a Alienware's Alienware 15 R3 notebook, which is widely sold and distributed in Texas and in this District. Retailers such as Amazon have and continue to sell the Alienware 15 R3 notebook.



### Amazon's Landing Page for an Alienware 15 R3 Notebook

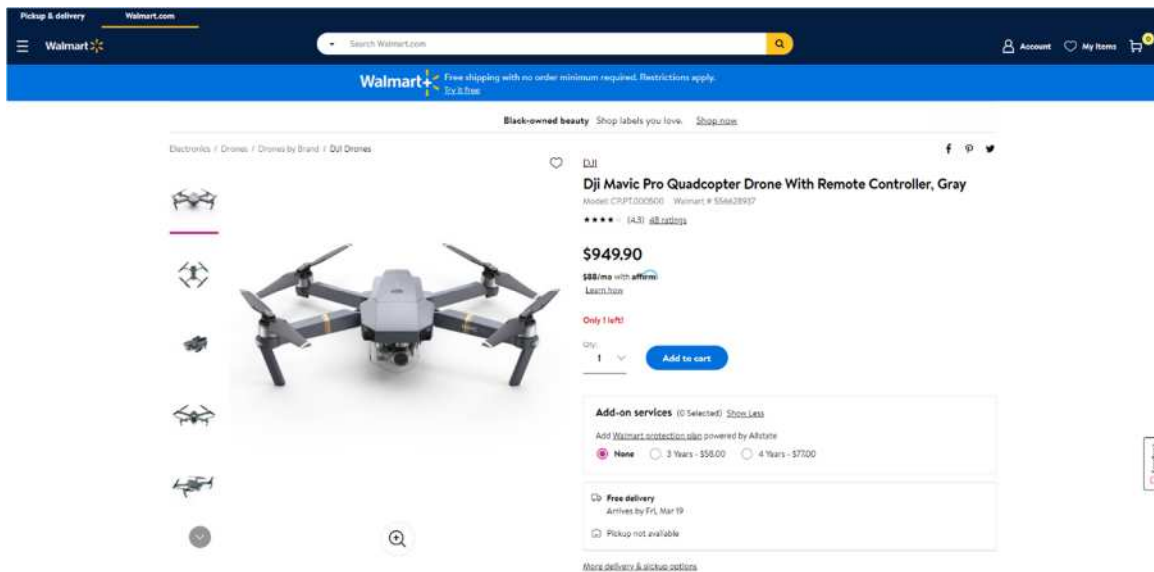
30. The Alienware 15 R3 notebook can be purchased through Amazon's website. *See Alienware 15 R3*, AMAZON.COM, <https://www.amazon.com/Alienware-Quad-Core-i7-6700HQ-GeForce-GTX1060/dp/B01LY2I7B6>.

31. For example, the DJI Mavic drone utilizes an infringing LIB cell. Upon information and belief, ATL designed and manufactured a LIB cell with model number 785075 for use in the DJI Mavic drone.



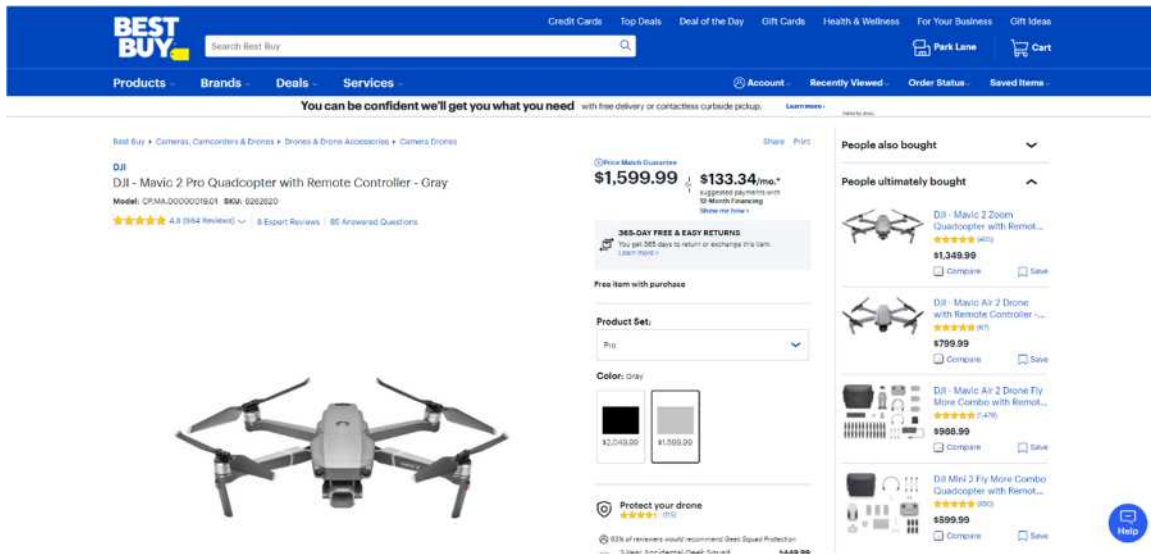
ATL'S LIB Cell No. 785075 in DJI Mavic Drone

32. Upon information and belief, the DJI Mavic drone, designed and sold by DJI, is widely sold and distributed in Texas and in this District. Retailers such as Amazon.com, Best Buy, and Walmart have and continue to sell the DJI Mavic.



Walmart's Landing Page for a DJI Mavic Drone

33. The DJI Mavic drone can be purchased through Walmart's website. *See DJI Mavic*, WALMART.COM, <https://www.walmart.com/ip/Dji-Mavic-Pro-Quadcopter-Drone-With-Remote-Controller-Gray/54889431>.



Best Buy's Landing Page for a DJI Mavic Drone

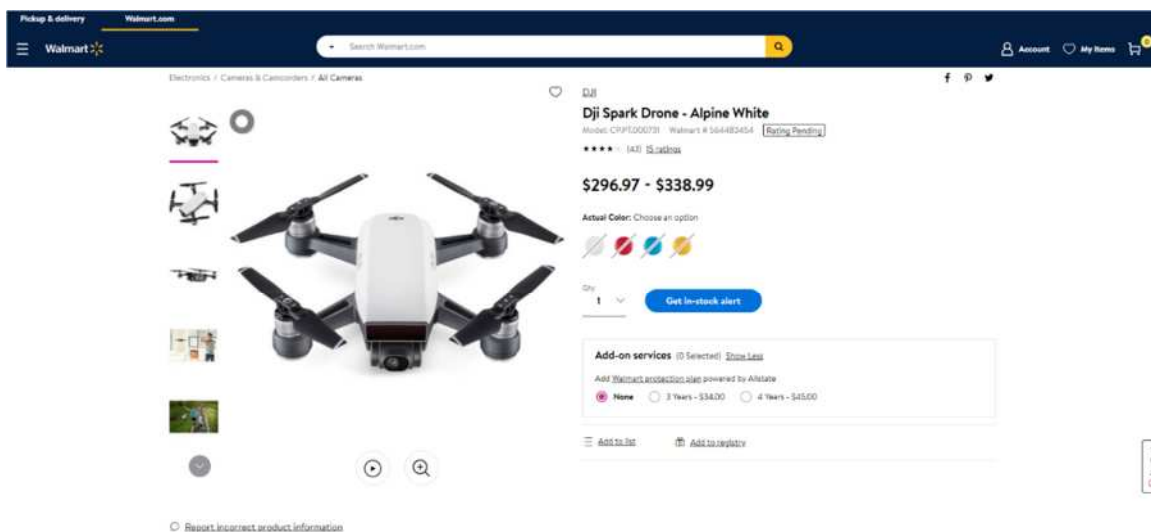
34. The DJI Mavic drone can be purchased through Best Buy's website. *See DJI Mavic*, BESTBUY.COM, <https://www.bestbuy.com/site/dji-mavic-2-pro-quadcopter-with-remote-controller-gray/6262620.p?skuId=6262620>.

35. For example, the DJI Spark drone utilizes an infringing LIB cell. Upon information and belief, ATL designed and manufactured a LIB cell with model number 633360 for use in the DJI Spark drone.



### ATL'S LIB Cell No. 633360 in DJI Spark Drone

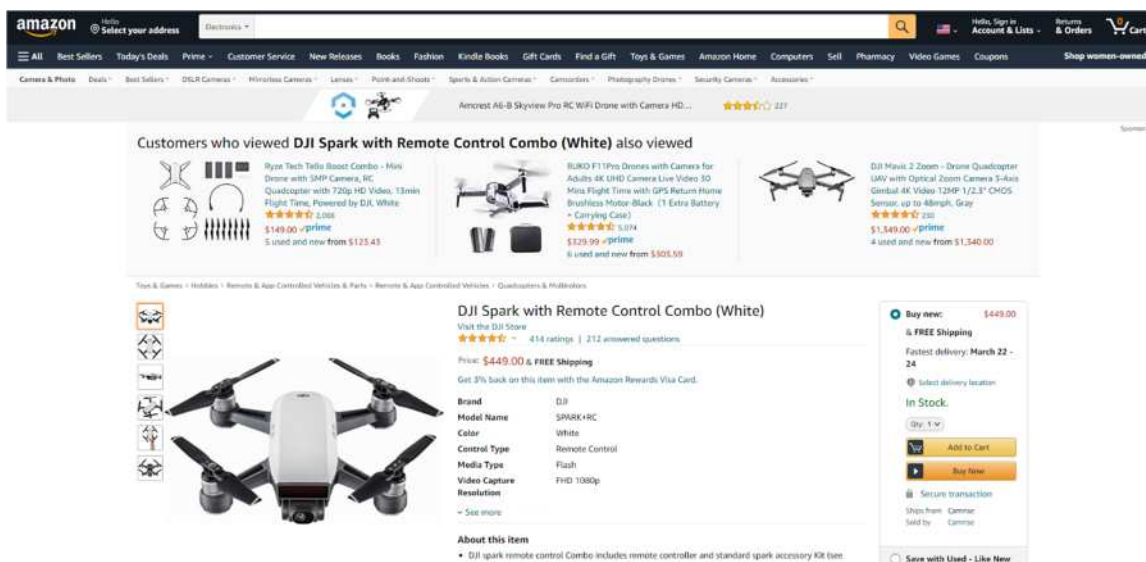
36. Upon information and belief, the DJI Spark drone, designed and sold by DJI, is widely sold and distributed in Texas and in this District. Retailers such as Amazon.com and Walmart have and continue to sell the DJI Spark.



### Walmart's Landing Page for a DJI Spark Drone



37. The DJI Spark drone can be purchased through Walmart's website. *See DJI Spark*, WALMART.COM, <https://www.walmart.com/ip/Dji-Spark-Drone-Alpine-White/55855184>.



#### Amazon.com's Landing Page for a DJI Spark Drone

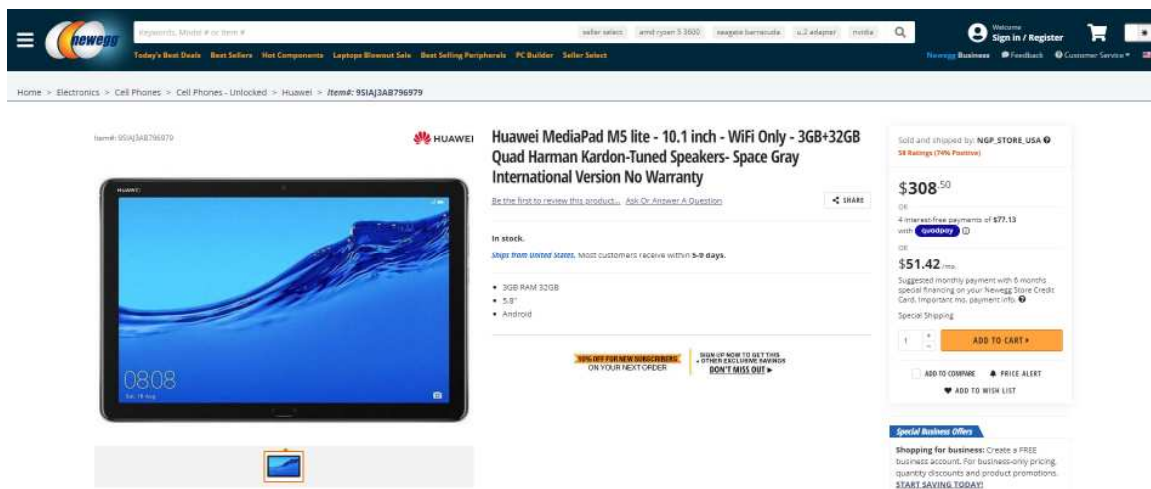
38. The DJI Spark drone can be purchased through Amazon.com's website. *See DJI Mavic*, AMAZON.COM, <https://www.amazon.com/DJI-Spark-Remote-Control-Combo/dp/B075TDRS2M>.

39. For example, the Huawei MediaPad M5 Lite tablet utilizes an infringing LIB cell. Upon information and belief, ATL designed and manufactured a LIB cell with model number 2798B7 for use in the Huawei MediaPad M5 Lite tablet.



#### ATL'S LIB Cell No. 2798B7 in Huawei MediaPad M5 Lite Tablet

40. Upon information and belief, the Huawei MediaPad M5 Lite tablet, designed and sold by Huawei, is widely sold and distributed in Texas and in this District. Retailers such as Newegg.com have and continue to sell the Huawei MediaPad M5 Lite.



#### Newegg.com's Landing Page for a Huawei MediaPad M5 Lite Tablet



41. The Huawei MediaPad M5 Lite tablet can be purchased through Newegg.com's website. *See Huawei MediaPad M5 Lite*, NEWEGG.COM, <https://www.newegg.com/p/23B-001M-006H2>.

42. The identification of these exemplary models is intended for illustration and is not intended to limit the scope of Maxell's allegations. Upon information and belief, further discovery will reveal additional infringing products. Any remedy should extend to all present and future infringing products of ATL regardless of model number.

43. Moreover, ATL owns property in the United States. For example, ATL has filed patent applications in the United States that have resulted in, for example, at least U.S. Patent Nos. 9,005,788; 9,118,192; 9,231,271; 9,564,669; and 9,853,462. ATL has availed itself of the United States Patent and Trademark Office through these patent applications, as well as through filing at least one application for *inter partes* review.

44. ATL also maintains an English-version website at <https://www.atlbattery.com/en>. On this website, ATL provides information regarding its activities and products, including its battery products. On information and belief, ATL's website is directed to marketing, offering for sale, and selling its products and services in the United States, including marketing, offering for sale, and selling its products and services in this judicial district.

45. Upon information and belief, ATL specifically designs its LIB products to be suitable for the U.S. market, including certifying compliance with U.S. standards and regulations.



Screenshot of ATL's Website Describing Worldwide Certification Compliance Capabilities

46. For example, ATL's website notes that it "can undertake battery product certifications in different markets worldwide in line with customer demands," including the Underwriters Laboratories and the FCC. *See* <https://www.atlbattery.com/en/about.html#quality>.

47. Upon information and belief, ATL has shipped directly LIB products into the United States and Texas.

48. For example, on information and belief, in or around February, July, and November 2014, ATL shipped LIB products from Hong Kong, SAR China to Los Angeles, CA for delivery to customer Tabletop Media, located in Dallas, TX. *See* <https://portexaminer.com/trade-data/amperex-technology-limited-tabletop-media/dfdshkg0128912/>; <https://portexaminer.com/trade-data/amperex-technology-limited-tabletop-media/topohkgffce70222/>; <https://portexaminer.com/trade-data/amperex-technology-limited-tabletop-media/topohkgffceb0081/>.

49. For example, on information and belief, in or around June 2016, ATL shipped LIB products from Hong Kong, SAR China to Long Beach, CA for delivery to customer Fire Training Structures, LLC, located in Phoenix, AZ. *See* <https://portexaminer.com/trade-data/amperex-technology-limited-fire-training-structures-llc/plhiata201505086/>.

50. For example, on information and belief, in or around November 2015, ATL shipped LIB products from Hong Kong, SAR China to Los Angeles, CA for delivery to customer Ensync Inc., located in Menomonee Falls, WI. *See* <https://portexaminer.com/trade-data/amperex-technology-limited-ensync-inc/plhiata201510196/>; <https://portexaminer.com/trade-data/amperex-technology-limited-ensync-inc/plhiata201510284/>; <https://portexaminer.com/trade-data/amperex-technology-limited-ensync-inc/plhiata201510285/>.

51. This Court has personal jurisdiction over ATL, directly or through intermediaries, distributors, importers, customers, subsidiaries, and/or consumers, because ATL has committed acts of direct and/or indirect patent infringement within Texas, and elsewhere within the United States, giving rise to this action and/or has established minimum contacts with Texas such that personal jurisdiction over ATL would not offend traditional notions of fair play and substantial justice.

52. In the alternative, if ATL maintains that it is not subject to personal jurisdiction of the courts of general jurisdiction of any state, the Court has personal jurisdiction over ATL under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, and exercising jurisdiction over ATL is consistent with the U.S. Constitution.

**THE ASSERTED PATENTS AND TECHNOLOGY**

53. The patents-in-suit include Maxell's United States Patent Nos. 8,691,446 ("the '446 Patent"), 9,350,019 ("the '019 Patent"), 9,077,035 ("the '035 Patent"), and 9,166,251 ("the '251 Patent"), (collectively, the "Asserted Patents").

54. On April 8, 2014, the USPTO duly and legally issued the '446 Patent, titled "Nonaqueous Secondary Battery And Method Of Using The Same" to inventors Hideo Sakata, Fusaji Kita, and Kumiko Ishizuka. A true and correct copy of the '446 Patent is attached as Exhibit 1 to this Complaint.

55. The '446 Patent is generally directed to the structure of a nonaqueous secondary battery with a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte containing a compound having two or more nitrile groups in the molecule. The '446 Patent discloses and specifically claims novel and non-obvious subject matter that represents improvements over conventional nonaqueous secondary batteries that were available as of the priority date of the application that became the '446 Patent.

56. On May 24, 2016, the USPTO duly and legally issued the '019 Patent, titled "Nonaqueous Secondary Battery And Method Of Using The Same" to inventors Hideo Sakata, Fusaji Kita, and Kumiko Ishizuka. A true and correct copy of the '019 Patent is attached as Exhibit 2 to this Complaint.

57. The '019 Patent stems from a divisional of application Ser. No. 11/976,566, which is now the '446 Patent, and is generally directed to the structure of a nonaqueous secondary battery with a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte containing a compound having two or more nitrile groups in the molecule. The '019 Patent discloses and specifically claims novel and non-obvious

subject matter that represents improvements over conventional nonaqueous secondary batteries that were available as of the priority date of the application that became the '019 Patent.

58. On July 7, 2015, the USPTO duly and legally issued the '035 Patent, titled “Nonaqueous Secondary Battery And Method Of Using The Same” to inventors Fusaji Kita, Hideki Tsubata, and Hiroyasu Inoue. A true and correct copy of the '035 Patent is attached as Exhibit 3 to this Complaint.

59. The '035 Patent is generally directed to the structure of a nonaqueous secondary battery with a positive electrode having a positive electrode mixture layer with active materials having different average particle sizes, a negative electrode, and a nonaqueous electrolyte. The '035 Patent discloses and specifically claims novel and non-obvious subject matter that represents improvements over conventional nonaqueous secondary batteries that were available as of the priority date of the application that became the '035 Patent.

60. On October 20, 2015, the USPTO duly and legally issued the '251 Patent, titled “Battery Separator And Nonaqueous Electrolyte Battery” to inventors Hideaki Katayama, Mitsuhiro Kishimi, Yoshinori Sato, Yasutaka Kuroki, and Toshiyuki Edamoto. A true and correct copy of the '251 Patent is attached as Exhibit 4 to this Complaint.

61. The '251 Patent is generally directed to the structure of a nonaqueous electrolyte battery with a positive electrode having a positive active material capable of intercalating and deintercalating a lithium ion, a negative electrode having a negative active material capable of intercalating and deintercalating a lithium ion, a separator interposed between the positive electrode and the negative electrode, and a nonaqueous electrolyte. The '251 Patent discloses and specifically claims novel and non-obvious subject matter that represents improvements over

conventional battery separators and nonaqueous secondary batteries that were available as of the priority date of the application that became the '251 Patent.

### **ATL'S INFRINGING PRODUCTS AND ACTIVITIES**

62. The claims of the Asserted Patents cover ATL's LIBs, their components, and processes related to the same (referred to herein as the "Accused Products" or "Infringing LIBs"). The Infringing LIBs are incorporated and utilized in various consumer devices, including "smartphones, tablets and notebooks OEMs, drones, robots and power tools specialists, VR/AR vanguards and various wearable and smart home technology trailblazers[.]" *See* <https://www.atlbattery.com/en/about.html>. For example, ATL's Cell Nos. 465867, 575577N, 785075, 633360, and 2798B7 are among the Infringing LIBs and are utilized in at least the Google Pixel 3a, Dell d/b/a Alienware Type 44T2R notebook battery, DJI Mavic, DJI Spark, and Huawei MediaPad M5 Lite, respectively.

63. ATL's customer Google designs, manufactures, and sells the Google Pixel 3a smartphone. Upon information and belief, Google distributes its products, including the Google Pixel 3a, across the U.S., including in Texas and this judicial district by direct sales as well as through its retail partners.

64. ATL's customer Dell d/b/a Alienware designs, manufactures, and sells the Type 44T2R notebook battery. Upon information and belief, Dell distributes its products, including the Type 44T2R notebook battery, across the U.S., including in Texas and this judicial district by direct sales as well as through its retail partners.

65. ATL's customer DJI designs, manufactures, and sells the DJI Mavic and DJI Spark drones. Upon information and belief, DJI distributes its products, including the DJI Mavic and DJI Spark, across the U.S., including in Texas and this judicial district by direct sales as well as through its retail partners.

66. ATL's customer Huawei designs, manufactures, and sells the Huawei MediaPad M5 Lite. Upon information and belief, Huawei distributes its products, including the Huawei MediaPad M5 Lite, across the U.S., including in Texas and this judicial district by direct sales as well as through its retail partners.

**COUNT I**

**INFRINGEMENT OF U.S. PATENT NO. 8,691,446**

67. Maxell re-alleges and incorporates by reference the allegations in paragraphs 1 to 66 above.

68. Maxell is the assignee of the '446 Patent. Maxell has all substantial rights to enforce the '446 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

69. The '446 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

70. ATL, by the acts complained of herein, and by making, using, selling, offering for sale, and/or importing in the United States, including in Texas and the Western District of Texas, Infringing LIBs, has in the past, does now, and continues to infringe one or more claims of the '446 Patent directly, contributorily, and/or by inducement, literally and/or under the doctrine of equivalents.

71. At a minimum, ATL has known of the '446 Patent at least as early as its receipt of a March 27, 2020 letter from Maxell.

72. ATL directly infringes at least claim 1 of the '446 Patent under 35 U.S.C. § 271(a) by making, using, selling, offering for sale in the United States, and/or importing into the United States, without permission, consent, authority or license, Infringing LIBs, including without limitation the ATL's Cell Nos. 465867, 575577N, 785075, 633360, and 2798B7

incorporated into the Google Pixel 3a, Dell d/b/a Alienware Type 44T2R notebook battery, DJI Mavic, DJI Spark, and Huawei MediaPad M5 Lite, respectively. Furthermore, upon information and belief, ATL sells and makes the Infringing LIBs outside of the United States, delivers the Infringing LIBs to its customers, distributors, and/or subsidiaries in the United States, or in the case that ATL delivers the Infringing LIBs outside of the United States, ATL does so intending and/or knowing that the Infringing LIBs are destined for the United States and/or are designing those products for sale in the United States, thereby directly infringing the '446 Patent.

Furthermore, ATL directly infringes the '446 Patent through its direct involvement in the activities of its manufacturing subsidiaries by importing the Infringing LIBs into the United States for its subsidiaries. Upon information and belief, ATL's subsidiaries conduct activities that constitutes direct infringement of the '446 Patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Infringing LIBs. ATL is vicariously liable for this infringing conduct as it has the right and ability to control its subsidiaries' infringing acts and receives a direct financial benefit from those acts.

73. Independent claim 1 of the '446 Patent recites:

1. A nonaqueous secondary battery comprising: a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte,  
 wherein the positive electrode contains, as an active material, at least two lithium-containing transition metal oxides having different average particle sizes,  
 wherein said at least two lithium-containing transition metal oxides having different average particle sizes have different compositions of elements between them,  
 said lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):





wherein  $M^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $M^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $M^3$  represents an element other than Li,  $M^1$  and  $M^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , the positive electrode mixture layer has a density of at least 3.5 g/cm<sup>3</sup>, and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

74. The ATL Cell No. 465867 designed, manufactured, and sold by ATL and incorporated into the Google Pixel 3a infringes at least claim 1 of the '446 Patent.

75. Upon information and belief, ATL manufactures Cell No. 465867, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $Li_xM^1_yM^2_zM^3_vO_2$  (the "'446 Patent's Formula 1"), wherein  $M^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $M^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $M^3$  represents an element other than Li,  $M^1$  and  $M^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Preliminary analysis suggests that the positive electrode active material of Cell No. 465867 contains more than one lithium-containing transition metal oxide, where the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide satisfies the requirements of the '446 Patent's Formula 1. Upon information and belief, the

positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

76. The ATL Cell No. 575577N designed, manufactured, and sold by ATL and incorporated in the Dell d/b/a Alienware Type 44T2R notebook battery infringes at least claim 1 of the '446 Patent.

77. Upon information and belief, ATL manufactures Cell No. 575577N, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Preliminary analysis suggests that the positive electrode active material of Cell No. 575577N contains more than one lithium-containing transition metal oxide, where the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide satisfies the requirements of the '446 Patent's Formula 1. Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

78. The ATL Cell No. 785075 designed, manufactured, and sold by ATL and incorporated into the DJI Mavic infringes at least claim 1 of the '446 Patent.

79. Upon information and belief, ATL manufactures Cell No. 785075, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and  $x$ ,  $y$ ,  $z$  and  $v$  are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Preliminary analysis suggests that the positive electrode active material of Cell No. 785075 contains more than one lithium-containing transition metal oxide, where the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide satisfies the requirements of the '446 Patent's Formula 1. Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

80. The ATL Cell No. 633360 designed, manufactured, and sold by ATL and incorporated into the DJI Spark infringes at least claim 1 of the '446 Patent.

81. Upon information and belief, ATL manufactures the Cell No. 633360, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Preliminary analysis suggests that the positive electrode active material of Cell No. 633360 contains more than one lithium-containing transition metal oxide, where the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide satisfies the requirements of the '446 Patent's Formula 1. Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

82. The ATL Cell No. 2798B7 designed, manufactured, and sold by ATL and incorporated into the Huawei MediaPad M5 Lite infringes at least claim 1 of the '446 Patent.

83. Upon information and belief, ATL manufactures Cell No. 2798B7, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief,

the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Preliminary analysis suggests that the positive electrode active material of Cell No. 2798B7 contains more than one lithium-containing transition metal oxide, where the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide satisfies the requirements of the '446 Patent's Formula 1. Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

84. The identification of these exemplary models is intended for illustration and is not intended to limit the scope of Maxell's allegations regarding the '446 Patent. Upon information and belief, further discovery will reveal additional of ATL's Infringing LIBs. Any remedy should extend to all present and future products of ATL that infringe the '446 Patent, regardless of model number.

85. Upon information and belief, ATL has actively induced, under 35 U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Infringing LIBs that include or are made using all of the limitations of one

or more claims of the '446 Patent to directly infringe one or more claims of the '446 Patent by using, offering for sale, selling, and/or importing ATL's Infringing LIBs. Since at least when notice was provided to ATL on or around March 27, 2020, ATL has done so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '446 Patent. Upon information and belief, ATL intends to cause, and has taken affirmative steps to induce infringement by distributors, customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of ATL's Infringing LIBs, creating established distribution channels for ATL's Infringing LIBs into and within the United States, manufacturing the Infringing LIBs which are combined with other products that must conform with U.S. laws and regulations (*e.g.*, Federal Communications Commission and Underwriter Laboratories' standards), distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to those purchasers in the United States.

86. Upon information and belief, ATL also contributorily infringes, under 35 U.S.C. § 271(c), one or more claims of the '446 Patent by offering for sale, selling, and/or importing into or within the United States components of infringing products, constituting a material part of the '446 Patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '446 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, ATL's Infringing LIBs and/or components thereof are specifically designed for use in infringement of the '446 Patent. Due to their specific designs, ATL's Infringing LIBs and/or components thereof do not have any substantial non-infringing uses.

87. Upon information and belief, despite having knowledge of the '446 Patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '446 Patent, ATL has nevertheless continued its infringing conduct. ATL's infringing activities relative to the '446 Patent have been, and continue to be willful and deliberate misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the compensatory amount awarded.

88. Maxell has been damaged as a result of ATL's infringing conduct. ATL is liable to Maxell in an amount that adequately compensates Maxell for ATL's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## **COUNT II**

### **INFRINGEMENT OF U.S. PATENT NO. 9,350,019**

89. Maxell re-alleges and incorporates by reference the allegations in paragraphs 1 to 88 above.

90. Maxell is the assignee of the '019 Patent. Maxell has all substantial rights to enforce the '019 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

91. The '019 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

92. ATL, by the acts complained of herein, and by making, using, selling, offering for sale, and/or importing in the United States, including in Texas and the Western District of Texas, instrumentalities embodying the invention, has in the past, does now, and continues to infringe one or more claims of the '019 Patent directly, contributorily, and/or by inducement, literally and/or under the doctrine of equivalents.

93. At a minimum, ATL has known of the '019 Patent at least as early as its receipt of a March 27, 2020 letter from Maxell.

94. ATL directly infringes at least claim 1 of the '019 Patent under 35 U.S.C. § 271(a) by making, using, selling, offering for sale in the United States, and/or importing into the United States, without permission, consent, authority or license, Infringing LIBs, including without limitation the ATL's Cell Nos. 465867, 575577N, 785075, 633360, and 2798B7 incorporated into the Google Pixel 3a, Dell d/b/a Alienware Type 44T2R notebook battery, DJI Mavic, DJI Spark, and Huawei MediaPad M5 Lite, respectively. Furthermore, upon information and belief, ATL sells and makes the Infringing LIBs outside of the United States, delivers the Infringing LIBs to its customers, distributors, and/or subsidiaries in the United States, or in the case that ATL delivers the Infringing LIBs outside of the United States, ATL does so intending and/or knowing that the Infringing LIBs are destined for the United States and/or are designing those products for sale in the United States, thereby directly infringing the '019 Patent. Furthermore, ATL directly infringes the '019 Patent through its direct involvement in the activities of its manufacturing subsidiaries by importing the Infringing LIBs into the United States for its subsidiaries. Upon information and belief, ATL's subsidiaries conduct activities that constitutes direct infringement of the '019 Patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Infringing LIBs. ATL is vicariously liable for this infringing conduct as it has the right and ability to control its subsidiaries' infringing acts and receives a direct financial benefit from those acts.

95. Independent claim 1 of the '019 Patent recites:

1. A nonaqueous secondary battery comprising: a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte, wherein



the positive electrode contains, as an active material, at least two lithium-containing transition metal oxides having different average particle sizes,  
 said lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):



wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg, or Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ ,

a content of Mg in the formula (1) is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $\text{M}^1$ ;

the positive electrode mixture layer has a density of at least 3.5 g/cm<sup>3</sup>; and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

96. The ATL Cell No. 465867 designed, manufactured, and sold by ATL and incorporated into the Google Pixel 3a infringes at least claim 1 of the '019 Patent.

97. Upon information and belief, ATL manufactures Cell No. 465867, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,

$M^1$  and  $M^2$ , and  $x$ ,  $y$ ,  $z$  and  $v$  are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Upon information and belief, the content of Mg in the aforementioned formula is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $M^1$ . Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

98. The ATL Cell No. 575577N designed, manufactured, and sold by ATL and incorporated in the Dell d/b/a Alienware Type 44T2R notebook battery infringes at least claim 1 of the '019 Patent.

99. Upon information and belief, ATL manufactures Cell No. 575577N, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $M^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $M^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $M^3$  represents an element other than Li,  $M^1$  and  $M^2$ , and  $x$ ,  $y$ ,  $z$  and  $v$  are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Upon information and belief, the content of Mg in the aforementioned formula is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $M^1$ . Upon information and belief, the positive electrode mixture layer has a

density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

100. The ATL Cell No. 785075 designed, manufactured, and sold by ATL and incorporated into the DJI Mavic infringes at least claim 1 of the '019 Patent.

101. Upon information and belief, ATL manufactures Cell No. 785075, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Upon information and belief, the content of Mg in the aforementioned formula is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $\text{M}^1$ . Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

102. The ATL Cell No. 633360 designed, manufactured, and sold by ATL and incorporated into the DJI Spark infringes at least claim 1 of the '019 Patent.

103. Upon information and belief, ATL manufactures the Cell No. 633360, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Upon information and belief, the content of Mg in the aforementioned formula is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $\text{M}^1$ . Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule.

104. The ATL Cell No. 2798B7 designed, manufactured, and sold by ATL and incorporated into the Huawei MediaPad M5 Lite infringes at least claim 1 of the '019 Patent.

105. Upon information and belief, ATL manufactures Cell No. 2798B7, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having (1) different average particle sizes and (2) different compositions of elements

between them. Upon information and belief, the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$ , wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents an element other than Li,  $\text{M}^1$  and  $\text{M}^2$ , and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ . Upon information and belief, the content of Mg in the aforementioned formula is from 0.15% by mole to less than 2% by mole based on an amount of the metal element  $\text{M}^1$ . Upon information and belief, the positive electrode mixture layer has a density of at least  $3.5 \text{ g/cm}^3$ , and the nonaqueous electrolyte contains a compound having at least two nitrile groups in the molecule, including at least adiponitrile.

106. The identification of these exemplary models is intended for illustration and is not intended to limit the scope of Maxell's allegations regarding the '019 Patent. Upon information and belief, further discovery will reveal additional of ATL's Infringing LIBs. Any remedy should extend to all present and future products of ATL that infringe the '019 Patent, regardless of model number.

107. Upon information and belief, ATL has actively induced, under 35 U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Infringing LIBs that include or are made using all of the limitations of one or more claims of the '019 Patent to directly infringe one or more claims of the '019 Patent by using, offering for sale, selling, and/or importing ATL's Infringing LIBs. Since at least when notice was provided to ATL on or around March 27, 2020, ATL has done so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '019 Patent.

Upon information and belief, ATL intends to cause, and has taken affirmative steps to induce infringement by distributors, customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of ATL's Infringing LIBs, creating established distribution channels for ATL's Infringing LIBs into and within the United States, manufacturing the Infringing LIBS which are combined with other products that must conform with U.S. laws and regulations (*e.g.*, Federal Communications Commission and Underwriter Laboratories' standards), distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to those purchasers in the United States.

108. Upon information and belief, ATL also contributorily infringes, under 35 U.S.C. § 271(c), one or more claims of the '019 Patent by offering for sale, selling, and/or importing into or within the United States components of infringing products, constituting a material part of the '019 Patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '019 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, ATL's Infringing LIBs and/or components thereof are specifically designed for use in infringement of the '019 Patent. Due to their specific designs, ATL's Infringing LIBs and/or components thereof do not have any substantial non-infringing uses.

109. Upon information and belief, despite having knowledge of the '019 Patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '019 Patent, ATL has nevertheless continued its infringing conduct. ATL's infringing activities relative to the '019 Patent have been, and continue to be willful and deliberate misconduct beyond typical

infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the compensatory amount awarded.

110. Maxell has been damaged as a result of ATL's infringing conduct. ATL is liable to Maxell in an amount that adequately compensates Maxell for ATL's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

### **COUNT III**

#### **INFRINGEMENT OF U.S. PATENT NO. 9,077,035**

111. Maxell re-alleges and incorporates by reference the allegations in paragraphs 1 to 110 above.

112. Maxell is the assignee of the '035 Patent. Maxell has all substantial rights to enforce the '035 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

113. The '035 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

114. ATL, by the acts complained of herein, and by making, using, selling, offering for sale, and/or importing in the United States, including in Texas and the Western District of Texas, instrumentalities embodying the invention, has in the past, does now, and continues to infringe one or more claims of the '035 Patent directly, contributorily, and/or by inducement, literally and/or under the doctrine of equivalents.

115. At a minimum, ATL has known of the '035 Patent at least as early as its receipt of a March 26, 2021 letter from Maxell.

116. ATL directly infringes at least claim 1 of the '035 Patent under 35 U.S.C. § 271(a) by making, using, selling, offering for sale in the United States, and/or importing into the

United States, without permission, consent, authority or license, Infringing LIBs, including without limitation the ATL's Cell Nos. 465867, 575577N, 785075, 633360, and 2798B7 incorporated into the Google Pixel 3a, Dell d/b/a Alienware Type 44T2R notebook battery, DJI Mavic, DJI Spark, and Huawei MediaPad M5 Lite, respectively. Furthermore, upon information and belief, ATL sells and makes the Infringing LIBs outside of the United States, delivers the Infringing LIBs to its customers, distributors, and/or subsidiaries in the United States, or in the case that ATL delivers the Infringing LIBs outside of the United States, ATL does so intending and/or knowing that the Infringing LIBs are destined for the United States and/or are designing those products for sale in the United States, thereby directly infringing the '035 Patent. Furthermore, ATL directly infringes the '035 Patent through its direct involvement in the activities of its manufacturing subsidiaries by importing the Infringing LIBs into the United States for its subsidiaries. Upon information and belief, ATL's subsidiaries conduct activities that constitutes direct infringement of the '035 Patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Infringing LIBs. ATL is vicariously liable for this infringing conduct as it has the right and ability to control its subsidiaries' infringing acts and receives a direct financial benefit from those acts.

117. Independent claim 1 of the '035 Patent recites:

1. A nonaqueous secondary battery comprising:  
a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte,  
wherein the positive electrode comprises, as active materials, at least two lithium-containing transition metal oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):





wherein  $M^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $M^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $M^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ , and the lithium-containing transition metal oxide having the largest average particle size is a lithium containing transition metal oxide represented by the formula (2):



wherein  $M^1$ ,  $M^2$  and  $M^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ , wherein said electrolyte contains a fluorine-containing organic solvent, wherein the content of Co in the transition metal  $M^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole, wherein the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight, wherein the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight, and wherein an amount of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

118. The ATL Cell No. 465867 designed, manufactured, and sold by ATL and incorporated into the Google Pixel 3a infringes at least claim 1 of the '035 Patent.

119. Upon information and belief, ATL manufactures Cell No. 465867, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal

oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$  wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ . Upon information and belief, the lithium-containing transition metal oxide having the largest average particle size is a lithium-containing transition metal oxide represented by the formula (2):  $\text{Li}_a\text{M}^1_b\text{M}^2_c\text{M}^3_d\text{O}_2$  wherein  $\text{M}^1$ ,  $\text{M}^2$  and  $\text{M}^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ . Upon information and belief, the said electrolyte contains a fluorine-containing organic solvent. Upon information and belief, the content of Co in the transition metal  $\text{M}^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole. Upon information and belief, the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight. Upon information and belief, the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight. Upon information and belief, an amount of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

120. The ATL Cell No. 575577N designed, manufactured, and sold by ATL and incorporated in the Dell d/b/a Alienware Type 44T2R notebook battery infringes at least claim 1 of the '035 Patent.

121. Upon information and belief, ATL manufactures Cell No. 575577N, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$  wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ . Upon information and belief, the lithium-containing transition metal oxide having the largest average particle size is a lithium-containing transition metal oxide represented by the formula (2):  $\text{Li}_a\text{M}^1_b\text{M}^2_c\text{M}^3_d\text{O}_2$  wherein  $\text{M}^1$ ,  $\text{M}^2$  and  $\text{M}^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ . Upon information and belief, the said electrolyte contains a fluorine-containing organic solvent. Upon information and belief, the content of Co in the transition metal  $\text{M}^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole. Upon

information and belief, the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight. Upon information and belief, the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight. Upon information and belief, an amount of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

122. The ATL Cell No. 785075 designed, manufactured, and sold by ATL and incorporated into the DJI Mavic infringes at least claim 1 of the '035 Patent.

123. Upon information and belief, ATL manufactures Cell No. 785075, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$  wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ . Upon information and belief, the lithium-containing transition metal oxide having the largest average particle size is a lithium-

containing transition metal oxide represented by the formula (2):  $\text{Li}_a\text{M}^1_b\text{M}^2_c\text{M}^3_d\text{O}_2$  wherein  $\text{M}^1$ ,  $\text{M}^2$  and  $\text{M}^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ . Upon information and belief, the said electrolyte contains a fluorine-containing organic solvent. Upon information and belief, the content of Co in the transition metal  $\text{M}^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole. Upon information and belief, the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight. Upon information and belief, the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight. Upon information and belief, an amount of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

124. The The ATL Cell No. 633360 designed, manufactured, and sold by ATL and incorporated into the DJI Spark infringes at least claim 1 of the '035 Patent.

125. Upon information and belief, ATL manufactures the Cell No. 633360, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$  wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element

selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $M^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ . Upon information and belief, the lithium-containing transition metal oxide having the largest average particle size is a lithium-containing transition metal oxide represented by the formula (2):  $\text{Li}_a\text{M}^1_b\text{M}^2_c\text{M}^3_d\text{O}_2$  wherein  $M^1$ ,  $M^2$  and  $M^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ . Upon information and belief, the said electrolyte contains a fluorine-containing organic solvent. Upon information and belief, the content of Co in the transition metal  $M^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole. Upon information and belief, the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight. Upon information and belief, the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight. Upon information and belief, an amount of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

126. The ATL Cell No. 2798B7 designed, manufactured, and sold by ATL and incorporated into the Huawei MediaPad M5 Lite infringes at least claim 1 of the '035 Patent.

127. U Upon information and belief, ATL manufactures Cell No. 2798B7, which is a nonaqueous secondary battery comprising a positive electrode having a positive electrode

mixture layer, a negative electrode, and a nonaqueous electrolyte. Upon information and belief, the positive electrode active material contains at least two lithium-containing transition metal oxides having different average particle sizes, and the lithium-containing transition metal oxide having the smallest average particle size is a lithium-containing transition metal oxide represented by the formula (1):  $\text{Li}_x\text{M}^1_y\text{M}^2_z\text{M}^3_v\text{O}_2$  wherein  $\text{M}^1$  represents at least one transition metal element selected from Co, Ni and Mn,  $\text{M}^2$  represents Mg and at least one metal element selected from the group consisting of Ti, Zr, Ge, Nb, Al and Sn,  $\text{M}^3$  represents at least one element selected from the group consisting of Na, K, Rb, Be, Ca, Sr, Ba, Sc, Y, La, Hf, V, Ta, Cr, Mo, W, Tc, Re, Fe, Ru, Rh, Cu, Ag, Au, B, Ca, In, Si, P and Bi, and x, y, z and v are numbers satisfying the equations respectively:  $0.97 \leq x < 1.02$ ,  $0.8 \leq y < 1.02$ ,  $0.002 \leq z \leq 0.05$ , and  $0 \leq v \leq 0.05$ , and has an average particle size from 2  $\mu\text{m}$  to 10  $\mu\text{m}$ . Upon information and belief, the lithium-containing transition metal oxide having the largest average particle size is a lithium-containing transition metal oxide represented by the formula (2):  $\text{Li}_a\text{M}^1_b\text{M}^2_c\text{M}^3_d\text{O}_2$  wherein  $\text{M}^1$ ,  $\text{M}^2$  and  $\text{M}^3$  are the same as defined in the formula (1), and a, b, c and d are numbers satisfying the equations respectively:  $0.97 \leq a < 1.02$ ,  $0.8 \leq b < 1.02$ ,  $0.0002 \leq c \leq 0.02$ , and  $0 \leq d \leq 0.02$ , and has an average particle size from 5  $\mu\text{m}$  to 25  $\mu\text{m}$ . Upon information and belief, the said electrolyte contains a fluorine-containing organic solvent. Upon information and belief, the content of Co in the transition metal  $\text{M}^1$  of the formulae (1) and (2) is from 30% by mole to 100% by mole. Upon information and belief, the content of said lithium-containing transition metal oxide having the smallest average particle size in the lithium-containing transition metal oxides is from 5% by weight to 60% by weight. Upon information and belief, the content of said lithium-containing transition metal oxide having the largest average particle size in the lithium-containing transition metal oxides is from 40% by weight to 95% by weight. Upon information and belief, an amount

of said fluorine-containing organic solvent is 0.1% by weight to 30% by weight based on the whole weight of the electrolyte.

128. The identification of these exemplary models is intended for illustration and is not intended to limit the scope of Maxell's allegations regarding the '035 Patent. Upon information and belief, further discovery will reveal additional of ATL's Infringing LIBs. Any remedy should extend to all present and future products of ATL that infringe the '035 Patent, regardless of model number.

129. Upon information and belief, ATL directly infringes at least claim 11 of the '035 Patent under 35 U.S.C. § 271(g) by importing, offering to sell, selling, and/or using within the United States, without permission, consent, authority or license, Infringing LIBs. Upon information and belief, ATL makes and sells the Infringing LIBs outside of the United States, delivers the Infringing LIBs to its customers, distributors, and/or subsidiaries in the United States, or in the case that it delivers the Infringing LIBs outside of the United States, ATL does so intending and/or knowing that the Infringing LIBs are destined for the United States and/or are designing those products for sale in the United States, thereby directly infringing the '035 Patent.

130. Upon information and belief, ATL has actively induced, under 35 U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Infringing LIBs that include or are made using all of the limitations of one or more claims of the '035 Patent to directly infringe one or more claims of the '035 Patent by using, offering for sale, selling, and/or importing ATL's Infringing LIBs. Since at least when notice was provided to ATL on or around March 26, 2021, ATL has done so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '035 Patent.



Upon information and belief, ATL intends to cause, and has taken affirmative steps to induce infringement by distributors, customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of ATL's Infringing LIBs, creating established distribution channels for ATL's Infringing LIBs into and within the United States, manufacturing the Infringing LIBS which are combined with other products that must conform with U.S. laws and regulations (*e.g.*, Federal Communications Commission and Underwriter Laboratories' standards), distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to those purchasers in the United States.

131. Upon information and belief, ATL also contributorily infringes, under 35 U.S.C. § 271(c), one or more claims of the '035 Patent by offering for sale, selling, and/or importing into or within the United States components of infringing products, constituting a material part of the '035 Patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '035 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, ATL's Infringing LIBs and/or components thereof are specifically designed for use in infringement of the '035 Patent. Due to their specific designs, ATL's Infringing LIBs and/or components thereof do not have any substantial non-infringing uses.

132. Upon information and belief, despite having knowledge of the '035 Patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '035 Patent, ATL has nevertheless continued its infringing conduct. ATL's infringing activities relative to the '035 Patent have been, and continue to be willful and deliberate misconduct beyond typical

infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the compensatory amount awarded.

133. Maxell has been damaged as a result of ATL's infringing conduct. ATL is liable to Maxell in an amount that adequately compensates Maxell for ATL's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **COUNT IV**

##### **INFRINGEMENT OF U.S. PATENT NO. 9,166,251**

134. Maxell re-alleges and incorporates by reference the allegations in paragraphs 1 to 133 above.

135. Maxell is the assignee of the '251 Patent. Maxell has all substantial rights to enforce the '251 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

136. The '251 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

137. ATL, by the acts complained of herein, and by making, using, selling, offering for sale, and/or importing in the United States, including in Texas and the Western District of Texas, instrumentalities embodying the invention, has in the past, does now, and continues to infringe one or more claims of the '251 Patent directly, contributorily, and/or by inducement, literally and/or under the doctrine of equivalents.

138. At a minimum, ATL has known of the '251 Patent at least as early as its receipt of a March 26, 2021 letter from Maxell.

139. For example, ATL directly infringes at least claims 1 and 10 of the '251 Patent under 35 U.S.C. § 271(a) by making, using, selling, offering for sale in the United States, and/or

importing into the United States, without permission, consent, authority or license, Infringing LIBs, including without limitation the ATL's Cell No. 575577N incorporated into the Dell d/b/a Alienware Type 44T2R notebook battery. Furthermore, upon information and belief, ATL sells and makes the Infringing LIBs outside of the United States, delivers the Infringing LIBs to its customers, distributors, and/or subsidiaries in the United States, or in the case that ATL delivers the Infringing LIBs outside of the United States, ATL does so intending and/or knowing that the Infringing LIBs are destined for the United States and/or are designing those products for sale in the United States, thereby directly infringing the '251 Patent. Furthermore, ATL directly infringes the '251 Patent through its direct involvement in the activities of its manufacturing subsidiaries by importing the Infringing LIBs into the United States for its subsidiaries. Upon information and belief, ATL's subsidiaries conduct activities that constitutes direct infringement of the '251 Patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Infringing LIBs. ATL is vicariously liable for this infringing conduct as it has the right and ability to control its subsidiaries' infringing acts and receives a direct financial benefit from those acts.

140. Independent claim 1 of the '251 Patent recites:

1. A battery separator comprising:  
 heat-resistant fine particles; and  
 a thermoplastic resin,  
 wherein the heat-resistant fine particles along with a binder  
 constitute a heat-resistant layer,  
 the thermoplastic resin constitutes a shutdown layer formed of a  
 heat-shrinkable microporous film,  
 the heat-resistant layer and the shutdown layer are integrated into a  
 multilayer structure,  
 the shutdown layer has a thickness A ( $\mu\text{m}$ ) of 5 to 30, the heat-  
 resistant layer has a thickness B ( $\mu\text{m}$ ) of 1 to 10, a sum of A and  
 B is 6 to 23, and a ratio A/B is 1/2 to 4,

- a content of the heat-resistant fine particles in the heat resistant layer is 50 vol % or more of a total volume of components in the heat-resistant layer,
- a proportion of particles with a particle size of 0.2  $\mu\text{m}$  or less in the heat-resistant fine particles is 10 vol % or less and a proportion of particles with a particle size of 2  $\mu\text{m}$  or more in the heat-resistant fine particles is 10 vol % or less, and
- a shutdown is effected in a range of 135° C. to 150° C.

141. Independent claim 10 of the '251 Patent recites:

10. A nonaqueous electrolyte battery comprising:  
a positive electrode having a positive active material capable of intercalating and deintercalating a lithium ion;  
a negative electrode having a negative active material capable of intercalating and deintercalating a lithium ion;  
a separator interposed between the positive electrode and the negative electrode; and  
a nonaqueous electrolyte,  
wherein a heat generation starting temperature of the positive electrode is 180° C. or higher, and  
wherein the separator is the battery separator according to claim 1.

142. The ATL Cell No. 575577N designed, manufactured, and sold by ATL and incorporated in the Dell d/b/a Alienware Type 44T2R notebook battery infringes at least claims 1 and 10 of the '251 Patent.

143. Upon information and belief, ATL manufactures Cell No. 575577N, which contains a battery separator comprising heat-resistant fine particles; and a thermoplastic resin, wherein the heat-resistant fine particles along with a binder constitute a heat-resistant layer. Upon information and belief, the thermoplastic resin constitutes a shutdown layer formed of a heat-shrinkable microporous film, and the heat-resistant layer and the shutdown layer are integrated into a multilayer structure. Upon information and belief, the shutdown layer has a thickness A ( $\mu\text{m}$ ) of 5 to 30, the heat-resistant layer has a thickness B ( $\mu\text{m}$ ) of 1 to 10, a sum of A and B is 6 to 23, and a ratio A/B is 1/2 to 4. Upon information and belief, the content of the heat-resistant fine particles in the heat-resistant layer is 50 vol % or more of a total volume of

components in the heat-resistant layer. Upon information and belief, a proportion of particles with a particle size of 0.2  $\mu\text{m}$  or less in the heat-resistant fine particles is 10 vol % or less and a proportion of particles with a particle size of 2  $\mu\text{m}$  or more in the heat-resistant fine particles is 10 vol % or less. Upon information and belief, a shutdown is effected in a range of 135° C. to 150° C.

144. Upon information and belief, Cell No. 575577N is a nonaqueous electrolyte battery comprising a positive electrode having a positive active material capable of intercalating and deintercalating a lithium ion; a negative electrode having a negative active material capable of intercalating and deintercalating a lithium ion; a separator interposed between the positive electrode and the negative electrode; and a nonaqueous electrolyte. Upon information and belief, the heat generation starting temperature of the positive electrode is 180° C. or higher, and the separator is the battery separator according to claim 1 of the '251 patent, as described above.

145. The identification of this exemplary model is intended for illustration and is not intended to limit the scope of Maxell's allegations regarding the '251 Patent. Upon information and belief, further discovery will reveal additional of ATL's Infringing LIBs. Any remedy should extend to all present and future products of ATL that infringe the '251 Patent, regardless of model number.

146. Upon information and belief, ATL has actively induced, under 35 U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Infringing LIBs that include or are made using all of the limitations of one or more claims of the '251 Patent to directly infringe one or more claims of the '251 Patent by using, offering for sale, selling, and/or importing ATL's Infringing LIBs. Since at least when notice was provided to ATL on or around March 26, 2021, ATL has done so with knowledge, or

with willful blindness of the fact, that the induced acts constitute infringement of the '251 Patent. Upon information and belief, ATL intends to cause, and has taken affirmative steps to induce infringement by distributors, customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of ATL's Infringing LIBs, creating established distribution channels for ATL's Infringing LIBs into and within the United States, manufacturing the Infringing LIBs which are combined with other products that must conform with U.S. laws and regulations (*e.g.*, Federal Communications Commission and Underwriter Laboratories' standards), distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to those purchasers in the United States.

147. Upon information and belief, ATL also contributorily infringes, under 35 U.S.C. § 271(c), one or more claims of the '251 Patent by offering for sale, selling, and/or importing into or within the United States components of infringing products, constituting a material part of the '251 Patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '251 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, ATL's Infringing LIBs and/or components thereof are specifically designed for use in infringement of the '251 Patent. Due to their specific designs, ATL's Infringing LIBs and/or components thereof do not have any substantial non-infringing uses.

148. Upon information and belief, despite having knowledge of the '251 Patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '251 Patent, ATL has nevertheless continued its infringing conduct. ATL's infringing activities relative to the '251 Patent have been, and continue to be willful and deliberate misconduct beyond typical

infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the compensatory amount awarded.

149. Maxell has been damaged as a result of ATL's infringing conduct. ATL is liable to Maxell in an amount that adequately compensates Maxell for ATL's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**DEMAND FOR JURY TRIAL**

150. Maxell respectfully requests a jury trial on all issues triable to a jury in this action.

**PRAYER FOR RELIEF**

WHEREFORE, Maxell requests the Court grant the following relief:

- A. A judgment that each of the Asserted Patents is valid and enforceable;
- B. A judgment that ATL has infringed directly and/or indirectly one or more claims of each of the Asserted Patents;
- C. A judgment that ATL has willfully infringed the Asserted Patents;
- D. A permanent injunction enjoining ATL, its employees, agents, officers, directors, attorneys, successors, affiliates, subsidiaries, and assigns, and all of those in active concert and participation with any of the foregoing persons or entities from infringing, directly and/or indirectly, the Asserted Patents;
- E. A judgment for an accounting of all damages and to pay damages adequate to compensate Maxell for ATL's infringement of the Asserted Patents;
- F. A judgment that the damages award be increased up to three times the actual amount assessed, pursuant to 35 U.S.C. § 284;

G. A judgment requiring ATL to pay Maxell costs, expenses, and pre-judgment and post-judgment interest for ATL's infringement of each of the Asserted Patents pursuant to 35 U.S.C. § 284;

H. A judgment finding that this is an exceptional case and awarding Maxell its reasonable attorneys' fees pursuant to 35 U.S.C. § 285; and

I. Such other relief that this Court deems just and proper.



Dated: April 8, 2021

Respectfully submitted,

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